

Suisun Marsh Habitat Management, Preservation, and Restoration Plan

Final Environmental Impact Statement/ Environmental Impact Report

Volume I: Main Report



U.S. Department of the Interior
Bureau of Reclamation



U.S. Fish and Wildlife Service



California Department of Fish
and Game

November 2011

What it is... & Why it works!

Presented By:



**Steven Chappell,
Executive Director,
Suisun Resource Conservation Dist.
SRCD - SMP Principal**

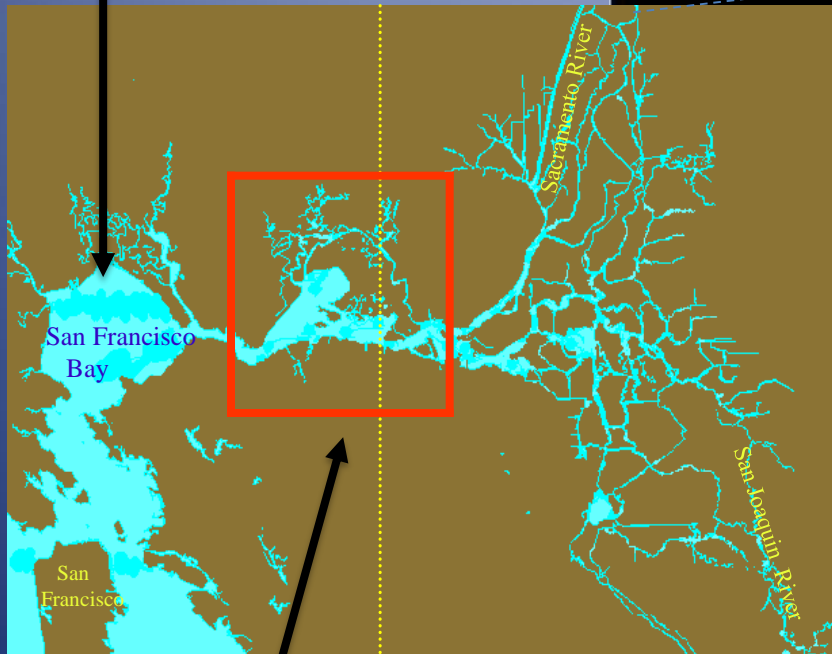


**Cliff Feldheim,
Suisun Marsh - Branch Chief,
Department of Water Resources
DWR – SMP Principal**

Agenda Item 8

The San Francisco Bay

THE DELTA



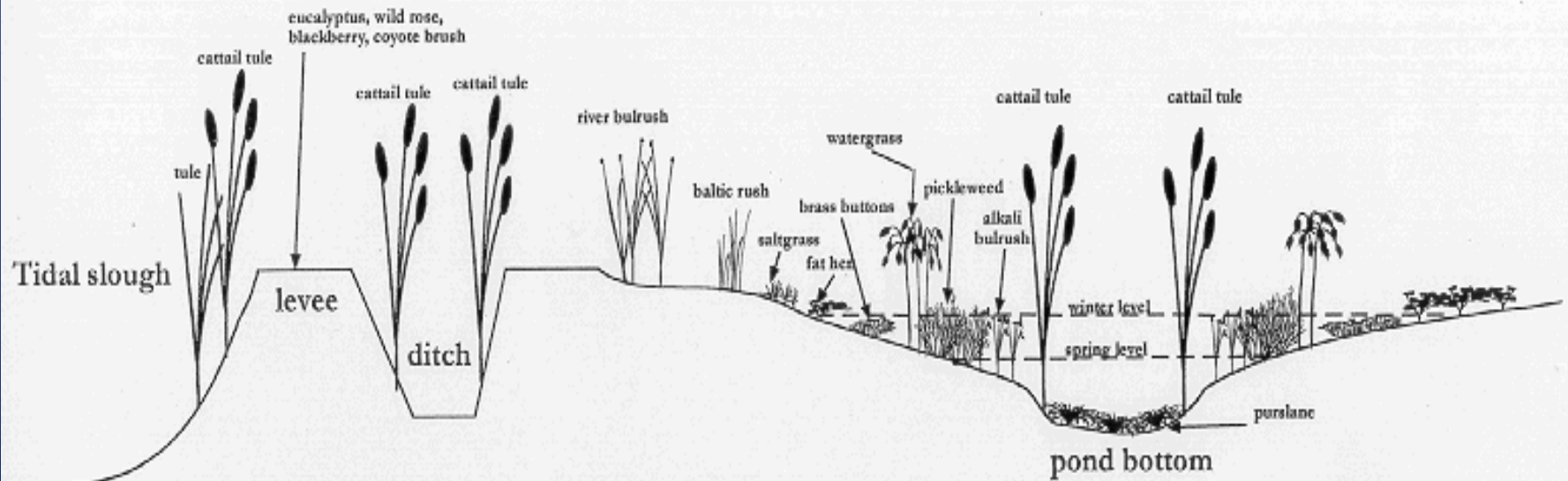
Where is Suisun Marsh?

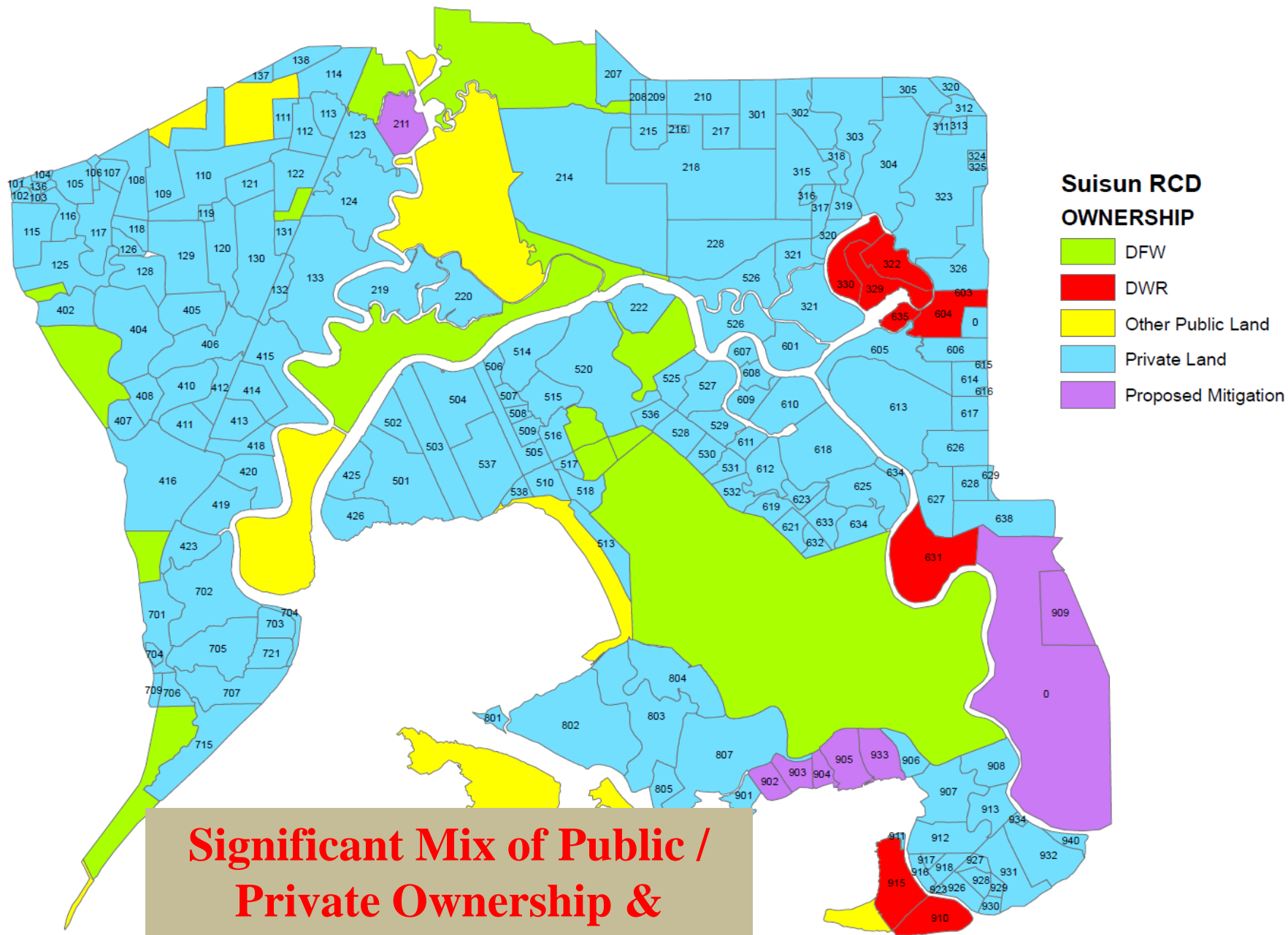


The Suisun Marsh is a Brackish Wetland

Managed Wetlands

Focused On Waterfowl Habitats





Early History - 1880's to 1960's

1870

1900

1920

1940

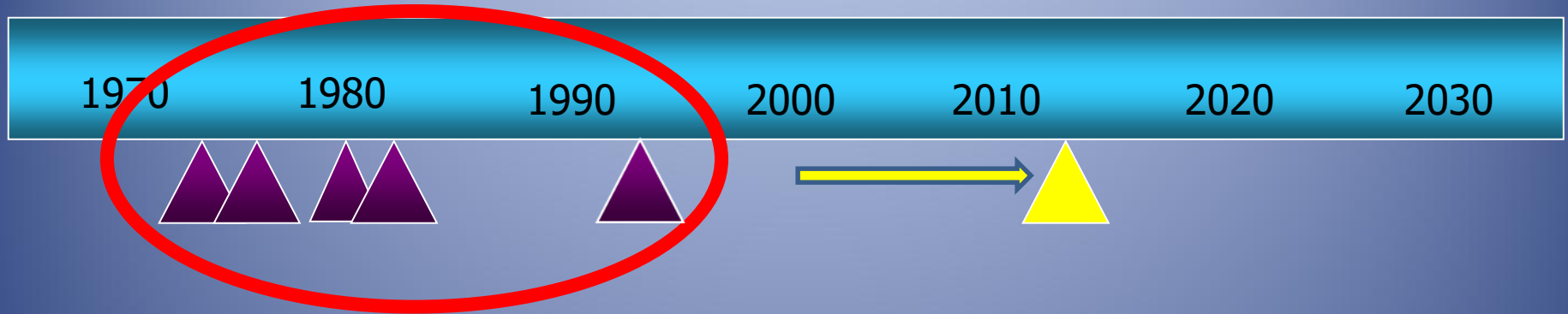
1950

1960

1970

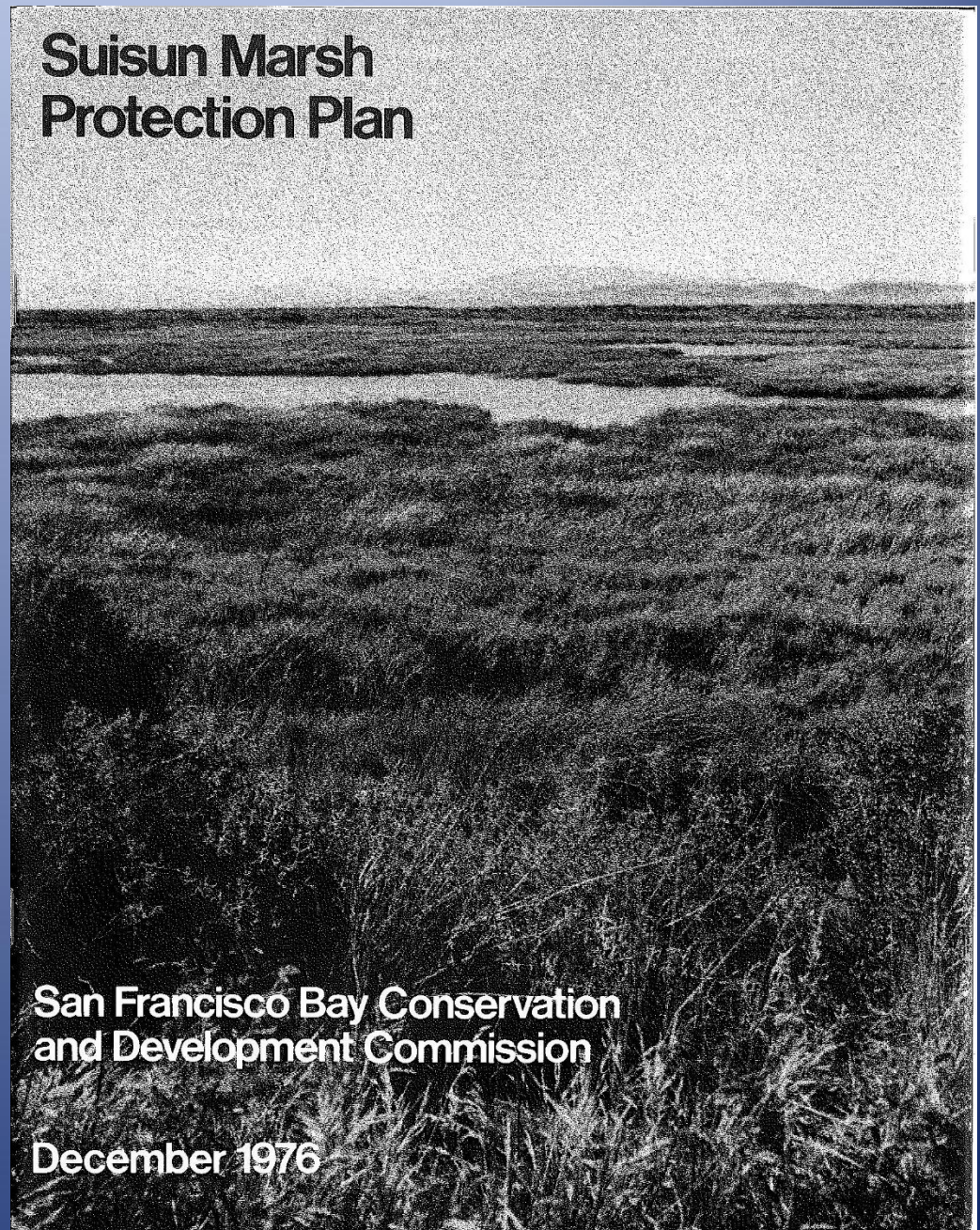
- 1878's Construction of the Southern Pacific RR Initiated
- 1881 First organized waterfowl hunting clubs in the western Suisun Marsh
- 1890's Diking of the eastern region of the Marsh for Agriculture, dairies, beef production
- 1931 DFW purchases Joice Island (1st State Wildlife Area) to reduce waterfowl crop depredation in the Central Valley
- 1940-50 Development of the Central Valley Water Projects
- 1950 Decline of Suisun Marsh Agriculture
- 1960's Most diked areas managed for wintering waterfowl

A Long History of Suisun Marsh Plans



- 1974 Nejedly-Bagley-Z'berg Suisun Marsh Preservation Act
- 1976 BCDC Suisun Marsh Protection Plan
- 1977 **Suisun Marsh Preservation Act**
- 1978 Water Rights D 1485 –Established Salinity Standards
- 1984 DWR Suisun Marsh Plan of Protection EIR
- 1987 Signature of the Suisun Marsh Preservation Agreement
- 1994 CALFED Program / Bay Delta Accord

- Established Land Use Protection Policies for Suisun
- Established Boundaries: Suisun Marsh Primary and Secondary Marsh
- Designated Regulatory Responsibilities to BCDC / Solano County



1984 - DWR Plan of Protection outlined a phased approach for DWR and Reclamation to construct water conveyance facilities, to meet newly established Suisun Marsh water quality salinity standards.

Montezuma Salinity Control Structure



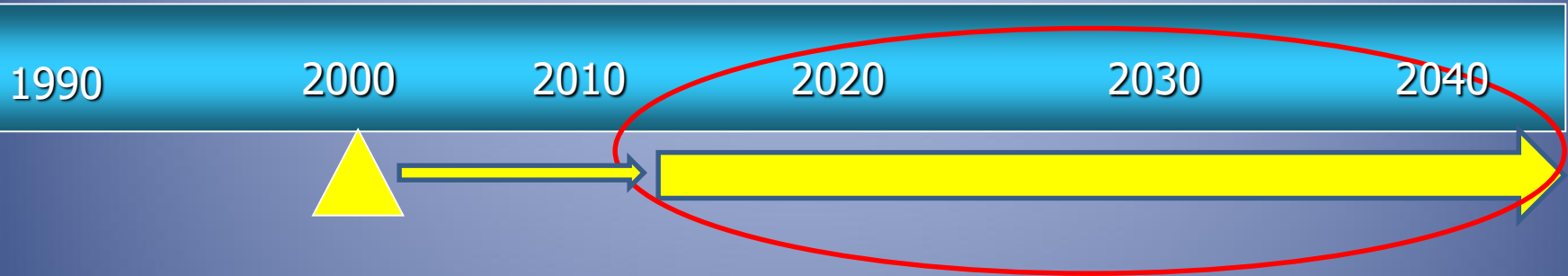
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

**PLAN OF PROTECTION
FOR THE SUISUN MARSH
including
ENVIRONMENTAL IMPACT REPORT**



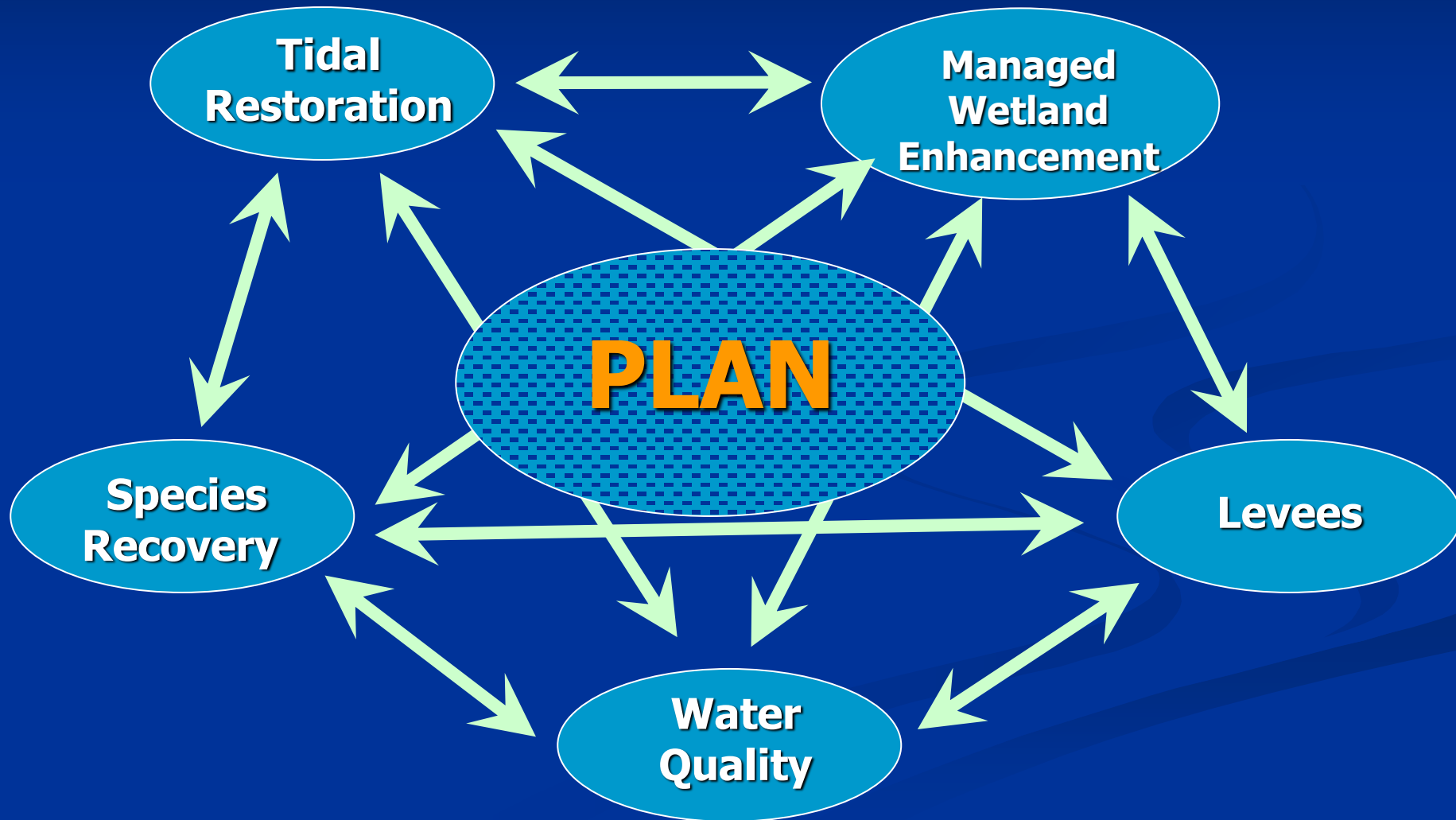
Central District
February 1984

The Next 30 Years



- 2000 CALFED Directed development of a Suisun Marsh Charter and Implementation Plan to address ongoing conflicts
- 2009 Delta Reform Act / Suisun is part of the Delta / Delta Plan
- 2011 Suisun Marsh Habitat Management (SMP) Plan EIR/EIS
- 2013 SMP ROD, USFWS and NMFS 30 Year BO's
- Provide Long Term Stable Regulatory Environment
 - Enhancement of 40,000 to 50,000 acres of Managed Wetland
 - Restoration of 5,000 to 7,000 Acres of tidal marsh

Suisun Marsh Plan Components



Charter Agency Participants

PRINCIPAL AGENCIES:



U.S. Bureau of Reclamation (Reclamation)



U.S. Fish and Wildlife Service (USFWS)



National Marine Fisheries Service (NMFS)



Suisun Resource Conservation District (SRCD)



California Department of Water Resources (DWR)



California Department of Fish and Wildlife (CDFW)



The Delta Stewardship Council (DSC)

OTHER AGENCIES:



U.S. Army Corps of Engineers



U.S. Geological Survey



San Francisco Bay Conservation and Development Commission



San Francisco Bay-Delta Science Consortium



San Francisco Bay Regional Water Quality Control Board

- A 13 Year Process
- Consensus Based
- Meetings Were Facilitated
- “Willing Seller” Only
- Restoration Targets are Regional and within a Range
- Met Regulatory, Habitat Management, Land-use and Species Recovery Needs

Effective Implementation Requires:

- Active Principal Agency Participation
- Monthly and Quarterly Meetings
- Decision Makers at the Table
- Adaptive Management Process and Long Term Monitoring Programs

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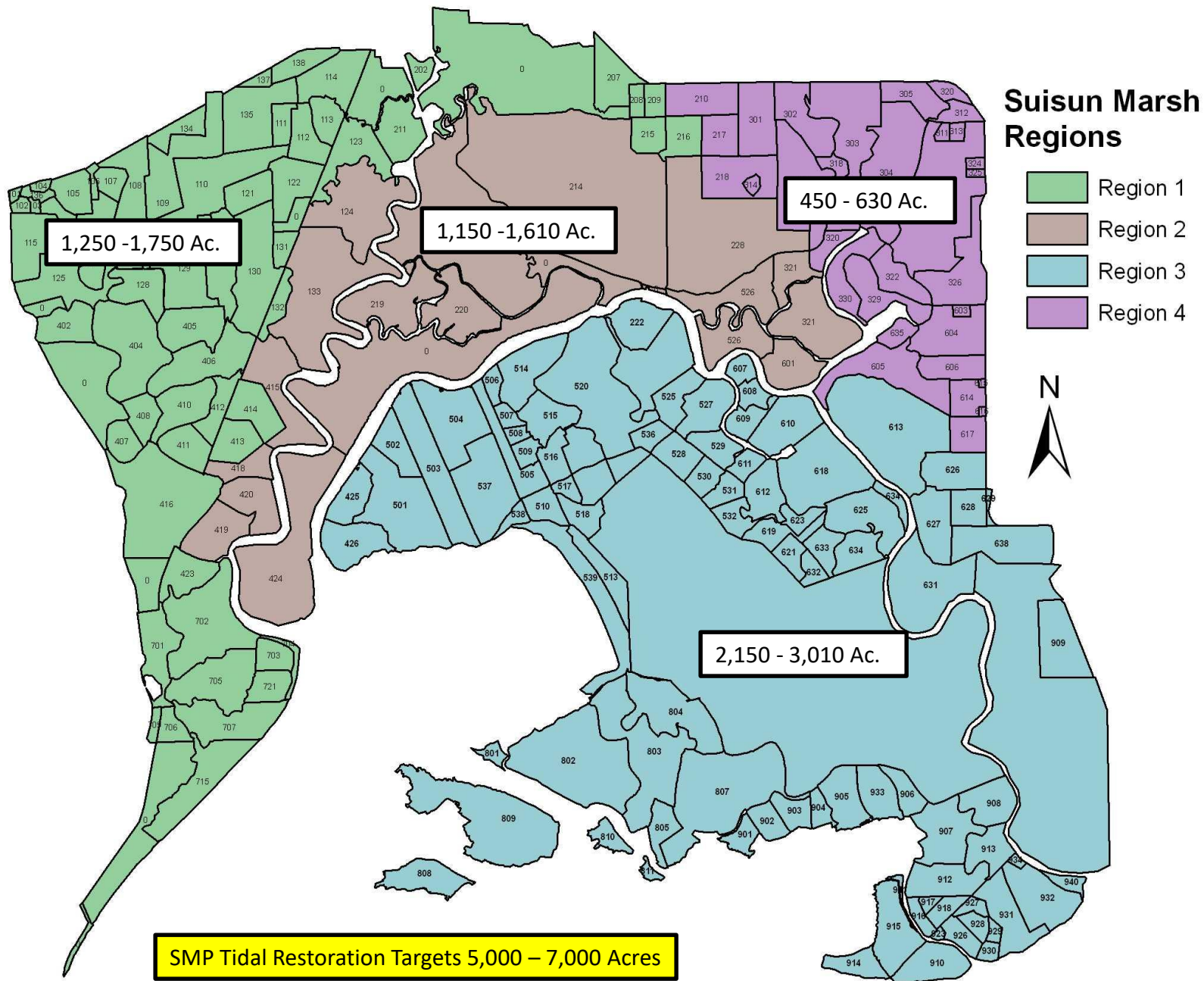


U.S. Fish and Wildlife Service



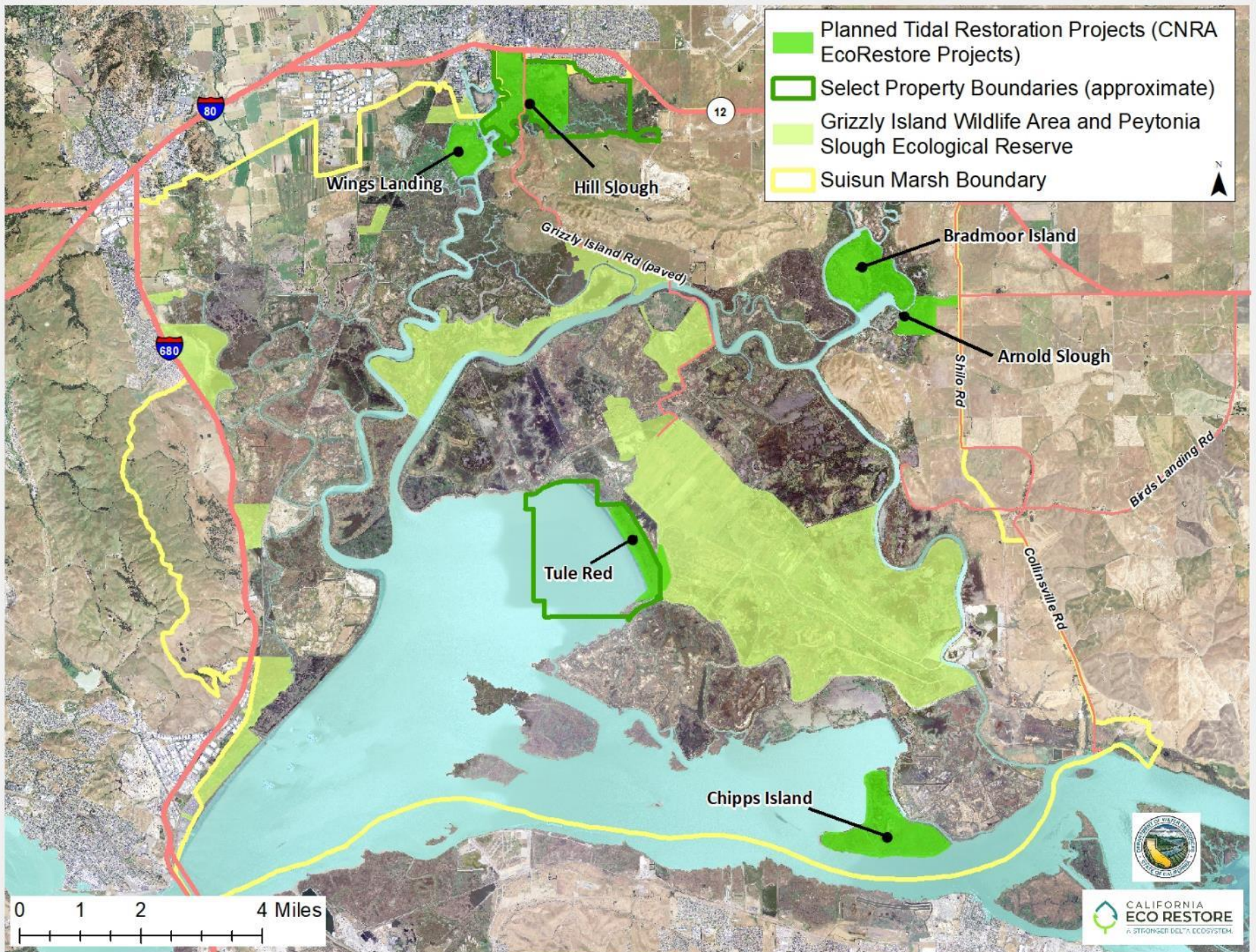
California Department of Fish
and Game

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The 2013 Suisun Marsh Habitat Management, Preservation, and Restoration Plan (30 Years)

- **Site-specific Actions:**
 - A new USACE Permits for managed wetlands operations and maintenance, with a levee maintenance dredging program
- **Programmatic EIR/EIS to tier-off of for future actions (Streamlining Project Permitting)**
 - Tidal restoration of 5,000 to 7,000 acres of existing diked managed wetlands over the next 30 years (willing seller only)

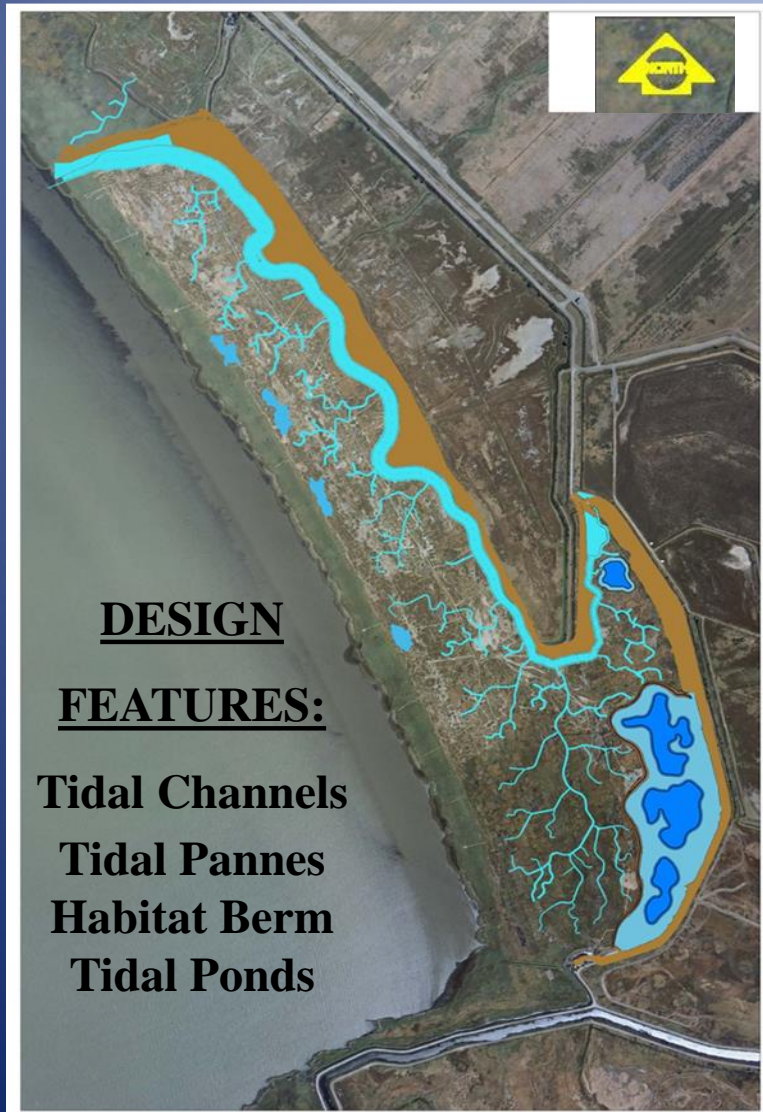


- Planned Tidal Restoration Projects (CNRA EcoRestore Projects)
- Select Property Boundaries (approximate)
- Grizzly Island Wildlife Area and Peytonia Slough Ecological Reserve
- Suisun Marsh Boundary

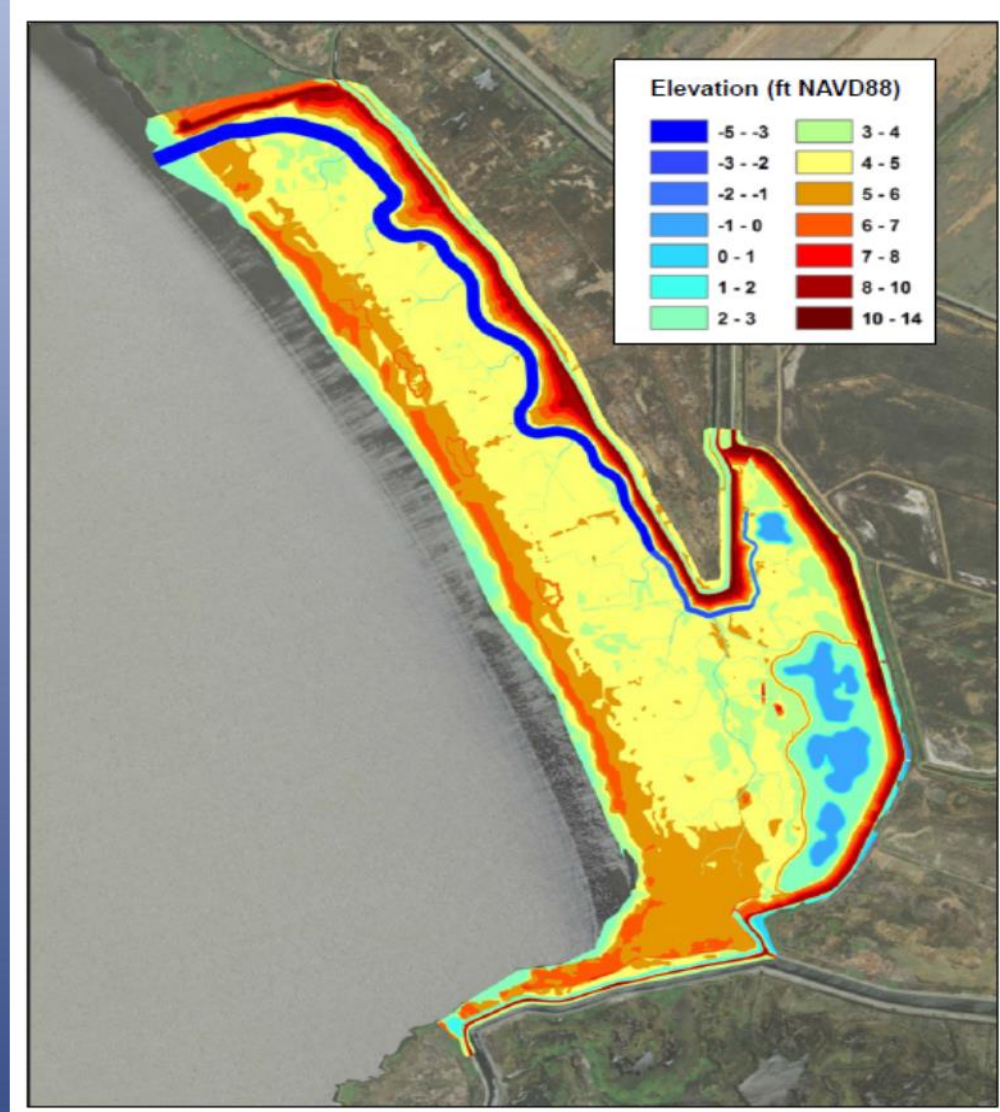
0 1 2 4 Miles



Tule Red: Restoration Design



Source: Westervelt Ecological Services, 2015



Source: RMA Tule Red
Salinity Modeling

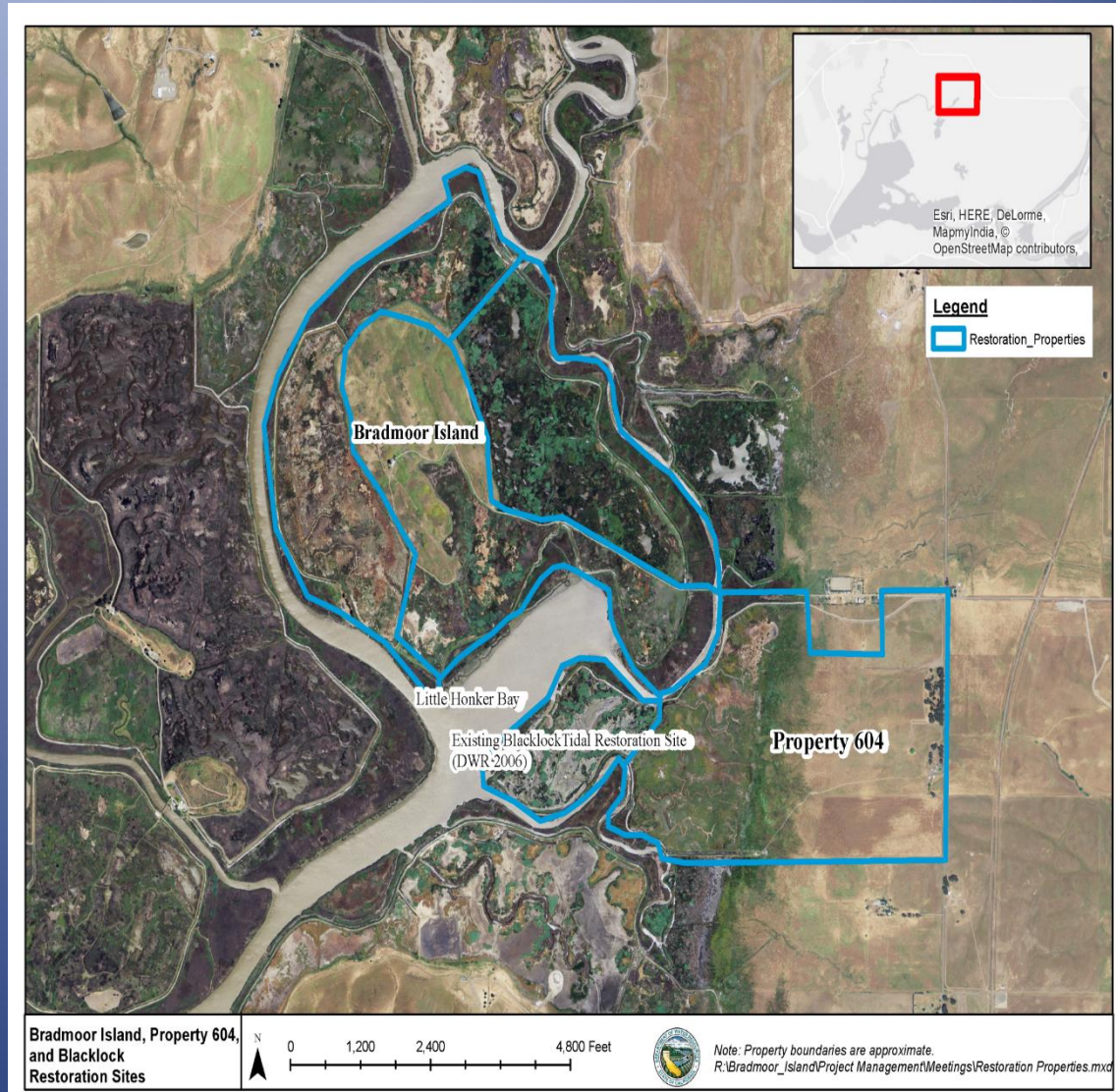
Bradmoor Island Tidal Restoration Design

Project information:

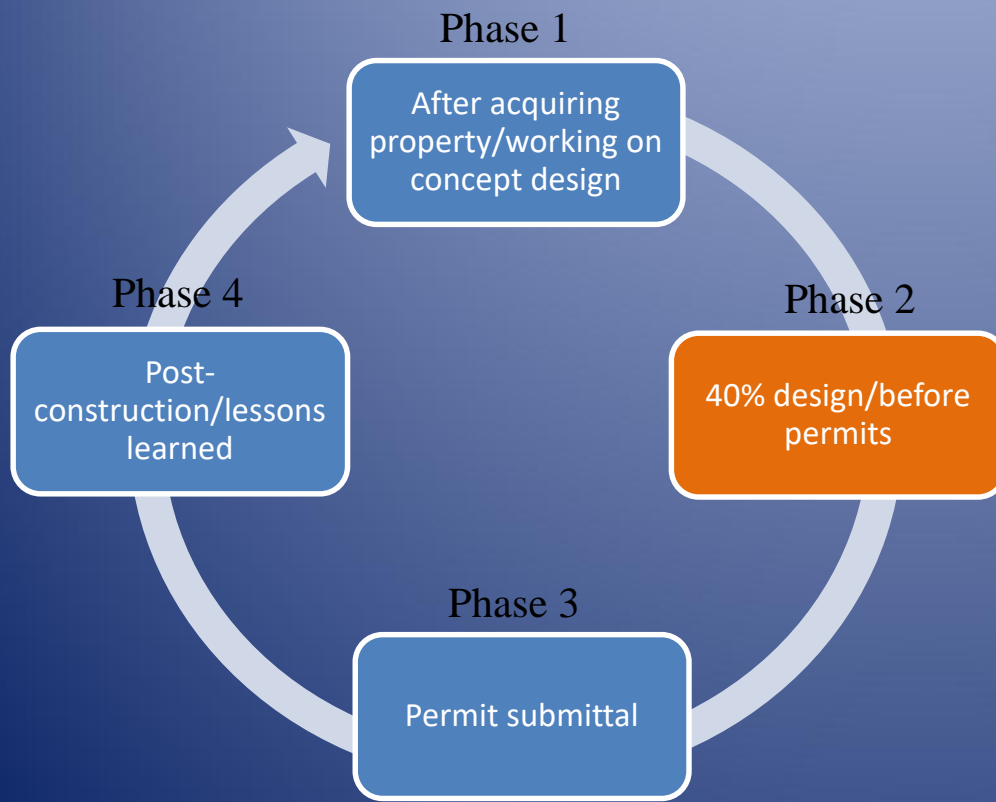
- 745 acres, including uplands and tidal berms
- Restoration is proposed to meet obligations of USFWS BiOp (2008), CDFW ITP (2009) and Suisun Marsh Plan

Restoration Actions:

- Interim Management to control invasive species
- Water Management to encourage vegetation establishment
- 5 exterior breaches in Fall 2020
- Monitoring and Adaptive Management



SMP Adaptive Management Advisory Team



- Provide expert evaluation and peer review of project design
- Interagency coordination
- Regulatory process updates
- Address key questions and scientific uncertainties
- ID opportunities at project site
- Coordinate effective and efficient monitoring requirements for permits
- Interim and long term management guidance
- SLR & Climate Change Considerations

Thank You!

Any Questions?

